

SIR WILLIAM WILLCOCKS A REAL BENEFACTOR OF MANKIND



Sir William Willcocks's plan for the irrigation of Mesopotamia, the original home of the Jews. His great scheme to prevent floods, to irrigate 3,000,000 acres of best land and to build a British railway from the Mediterranean to the Persian Gulf.

Famous Engineer Who Restored the Garden of Eden Has Increased Area of Cultivable Land by His Work in Egypt, Asia Minor and Elsewhere

By F. CUNLIFFE-OWEN.

ANY one who succeeds in increasing the area of cultivable land is a benefactor of mankind. This being the case, there is no other man now living to whom the world owes so great a debt of gratitude in this respect as it owes to Sir William Willcocks, who is at present visiting the United States for the purpose of affording to the national Government at Washington the benefit of his advice and of his unrivaled experience in dealing with the difficult problems connected with the regulation of the Mississippi and the various great irrigation works now in course of construction or about to be taken in hand by the Administration.

It is difficult to estimate with any degree of precision the vast extent of territory which Sir William has transformed either from swamp or from desert into cultivable land. In Egypt alone he has managed to double the area thereof, thus adding enormously to the revenues of the State and to the welfare and prosperity of the people.

In the Sudan, since its reconquest by Lord Kitchener in 1898, Sir William's work has been similarly efficacious, each year showing a large growth of the cultivable area; while by his ingenious and successful contrivances for the removal of the sudd—those huge masses of impenetrable and tangled vegetation which not only prevented the passage of boats upon the Nile above Khartoum but also sent much of the river to waste in fever breeding, flood swamps covering thousands of square miles—Sir William has opened the upper Nile to navigation to the great lakes which constitute its source, thus creating a new artery of trade between Central Africa and the outer world, at the same time greatly augmenting the volume of the Nile available for purposes of irrigation along its entire length of the Nile Valley down to the Mediterranean.

Before undertaking all this wonderful work in connection with the Nile, Sir William won his spurs, and incidentally much fame, by achievements of a kindred character in India as one of the principal engineers of the irrigation branch of the Public Works Department of King George's great Oriental empire. There has always been a tendency, not among thoughtful people but among the general public in the United States, to regard the British rule of India as tyrannical, oppressive and selfish in its alleged disregard of the welfare of the natives. But even if England had accomplished nothing else in India, her marvellous achievements in connection with the irrigation of all parts of the country and her immense addition to the cultivable area of the land, thus diminishing the number and severity of those terrible

famines by which India has been visited periodically since the dawn of history, should entitle her to the gratitude of the teeming native population of over three hundred millions, and should be regarded by mankind as the finest and most useful of all memorials of British sovereignty over Hindustan.

British South Africa, in particular the Transvaal, the Orange State and Cape Colony, have had recourse to Sir William Willcocks's experience and advice. He has paid several extended visits to that part of the world. The irrigation works there already in operation have been designed by him, and there are many more for which he is responsible that are either in course of construction or still in a state of project. All this means immediate and prospective addition to the cultivable area and consequently to the revenues of the State and to the prosperity of the people.

Of indefatigable energy and of altogether phenomenal activity, Sir William, not content with his labors in India, in South Africa, and as the master and mentor of old Father Nile—formerly so unruly but now entirely brought under subjection—accepted some years ago the post of chief of the Irrigation Department of the Ottoman Empire and set himself to work to restore the ancient Chaldaea to what it was in olden times, namely, the granary of the then known world. In the thousands of years that preceded the Christian era the valleys of the great rivers Tigris and Euphrates, which run almost parallel with each other from the mountains in northern Asia Minor to the Persian Gulf, were crisscrossed in every direction by a wonderful network of canals, the ruins of which, even to this day, are of a nature to excite admiration for the ingenuity and skill of the Babylonian engineers who designed and built them.

Intentional destruction, during the interminable wars and invasions which have succeeded one another almost without interruption in that part of the world for tens of centuries, as well as that neglect and incompetence which are so characteristic of life in the near Orient, completely put an end to the existence of this system of irrigation, with the result of transforming the valleys of the Tigris and the Euphrates and the country extending many hundreds of miles east and west of these streams into alternate swamp and desert, unfit for cultivation or even for habitation.

Sir William after the downfall of Sultan Abdul Hamid some five or six years ago, having been invited by the new regime at Constantinople to give his advice about the matter, undertook to restore the valley of the Euphrates and of the Tigris to their former fertility and prosperity. As the result of an elaborate survey of the entire district he submitted to the Sublime Porte complete designs and estimates for a vast series of works, comprising the reconstruction of most of the old Babylonian system of canals and the building of a number of new ones as well as a series of barrages and dams for the purpose of regulating the two rivers in question and preventing them from overflowing their banks and thus feeding the ever growing swamps.

Two great dams across the Euphrates have already been completed just

above and below Hindieh, about sixty miles, and a hundred miles to the south of Bagdad, one of the effects of which has been to revert the Euphrates into its old channel past Babylon, by the waters of which the Jews hundreds of years before Christ mourned their captivity and wept over the remembrance of their distant Zion. The two barrages in question have already had the effect of restoring to cultivation some 600,000 acres of land, which means that the cost of the building of the dams will be quickly paid off through the sale of the land and through the taxes which its new owners can afford to pay thereon.

Sir William estimates that the cost of his entire scheme of irrigation of the valley of the Euphrates and of the Tigris will amount to \$75,000,000, that the land reclaimed thereby for cultivation would amount to 4,000,000 acres and that its value when reclaimed would, according to conservative calculation, reach \$500,000,000.

It is because Sir William Willcocks can show such estimates as these, and can point to what he has accomplished in India, in South Africa and in Egypt to prove that his figures are correct, that governments are willing to undertake the expenditure involved in the works which he designs and which he recommends, realizing that the returns will be quick and in the long run a hundredfold. It was this confidence in Sir William's estimates that led Sir Ernest Cassel and other great capitalists of finance in London to advance all the money needed for the construction of the most important works for the regulation of the Nile, notably the great Assuan dam, which have all been brought into existence without any ad-

ditional tax upon the normal revenues of the Egyptian exchequer.

According to Sir William Willcocks the Garden of Eden was situated at the junction of the Tigris and the Euphrates in Mesopotamia, and his views about the matter are identical with those of the late Gen. "Chinese" Gordon, who was a fervent Biblical scholar, as well as with those of many other experts in Scriptural history. Thanks to Sir William, the Garden, which had degenerated into a mere fever stricken swamp incapable of supplying even the fig leaves used by the Father and Mother of the human race for raiment, is now being restored to the same degree of fertility as in the days when Eve wooed Adam with the fateful apple beneath the shadow of the branches of the Tree of Knowledge.

Sir William, by the by, rather discourages the story of the apple on the ground that apples have never grown in that particular part of the world. He insists that if Adam and Eve were turned out of the Garden of Eden it was not because of their eating the apples of the Tree of Knowledge, but because Eve, prompted probably by the serpent, had hit on a plan of making wine out of the bounteous supply of grapes in the Garden, thus causing Adam to become a tippler.

Sir William has many other somewhat disconcerting views about the Old Testament and takes no stock in the story according to which Noah's Ark rested on the top of Mount Ararat. He points out that the word Ararat really meant "desert" in the language of ancient times, and that what happened probably was that when the rivers Tigris and Euphrates inundated their valleys owing to the forty days of continuous rain the settlers in the lower part of the valleys hurried over to Noah to take refuge in his Ark, which, when the floods receded, remained stranded in the valley.

Sir William adds that the sufferers from this flood really thought that the

While Here He Will Help Solve Problem of Regulating the Mississippi and Other Great Irrigation Works to Be Undertaken by U. S. Government

inundation covered the entire world and commenced building high towers to escape future inundations. The Tower of Babel was one of the first of these, and while it was under way the people from the surrounding countries all rushed there for safety when another flood appeared imminent. Naturally there were many languages spoken, and a "confusion of tongues" was the result. This, according to Sir William, led the Tower builders to believe that God had sent a "confusion of tongues" because of the "penetration of the Tower into Heaven."

Sir William has views of his own about the Scriptural story of Moses leading the Children of Israel across the Red Sea. He points out that if Moses had gone to the Red Sea in the time he is credited with having taken, he would have had to lead his flock, in which there were many children, across forty-four miles of desert in twenty-four hours.

"Those people," he declares, "who still insist that the Israelites crossed the Red Sea admit that if they did so the Red Sea must have come up about thirty-one miles further north than it does to-day. Why should it be made to come up thirty-one miles. Just to satisfy those who adhere to a mistake made in the translation of the Scriptures?"

"What Moses did," argues Sir William, "was to lead his followers across the River Nile by means of building a dike across. When the Israelites crossed Moses cut the dike and the Egyptian army following them were drowned."

Sir William, like his brothers, was born and educated in India and is a member of one of those English fam-

ilies which have been for generations identified with English rule in India, and to which the British Crown is indebted more than to anything else for its ability to hold with a mere handful of white troops the immense empire of Hindustan, with its 300 millions of natives of rival races and creeds, who but for English rule would be engaged, as formerly, in internecine war and consequent ruin and devastation. It is owing to this birth and education in India that Sir William is able to grasp to a greater degree than any one reared in Western climes the peculiar train of thought, the mental processes, the queer moral standards and the figures of speech of the Oriental, all so different from our own.

He has even acquired from his constant intimate contact and intercourse with the Orientals something of their imagery of speech; is fond, as he confesses, of talking in parables, and when applying them to Western, twentieth century phases of life, such as official and private graft, manifests a quaint originality which is most fascinating. Indeed, at the luncheon given in his honor at the Whitehall Club in New York the other day by the Pilgrim Society, with its president, ex-Ambassador Joseph H. Choate, in the chair, he was so entertaining in his explanation of the reign of Saint Balaheesh in the Orient as almost to reconcile the 150 prominent bankers, business men and State and city officials present to the idea that graft was, after all, a somewhat necessary and certainly a rather picturesque evil.

Sir William entertains a very high opinion of the capacity of American engineers for dealing with the problems of irrigation and has given striking evidence thereof by engaging the services of H. L. Cooper (who acquired so much note in connection with the construction of the famous Keokuk dam across the Mississippi) as consulting engineer for the construction of the new hydro-electric dam across the Nile.

Each of the brothers of Sir William Willcocks has made his mark and has rendered useful service to the British Empire. One of them is the foremost railroad engineer of the Indian Government and the creator of many of the most important lines in that portion of King George's empire. Still another, who has done admirable work as one of the heads of the Indian Medical Service. Yet another, Sir James Willcocks, is one of the most brilliant of Indian frontier wars; has been repeatedly thanked by Parliament as well as presented with the freedom of the City of London, and now commands one of the two divisions of which the Anglo-Indian army is composed. In charge of the northern division, he may be said to be entrusted with the guard of the frontier of India.

Still another brother, whom some regard as the cleverest of them all, is a clergyman, famous at Oxford for his deep and varied knowledge of Oriental languages, who spent a quarter of a century of his life as a Government chaplain in India, where he incidentally became famous as a big game shot.

Since taking his pension he has turned engineer, and is now building railroads through the heart of the Indian forest through the sheer love of work.

None of the brothers, however, is likely to live so long in history as Sir William Willcocks, now in the United States. For he has built for himself, in the big dam across the Nile at Assuan, an enduring memorial of granite which in its cyclopean grandeur may be regarded as a worthy twentieth century counterpart of the Pyramids of the Pharaohs.

The Beer Pail in the Bag

THE latest method invented for the concealed carrying of beer from the wet goods emporium to the home may be seen in Harlem any weekday. A woman devised the scheme which for months kept the neighborhood guessing and caused innumerable persons to rack their brains trying to discover why this particular woman carried a Gladstone bag with her so often when she left her home. It was a surprise when it was learned that a beer pail was inside the bag.

Just to illustrate how resourceful the woman was it is only necessary to mention that although she ignored adults she was particularly anxious to have the children in the neighborhood recognize her. When they beheld the woman coming along the street with the Gladstone bag securely clutched in her right hand they flew away from her pastimes and over to her side, grasping her free hand and bidding her farewell. Apparently through the woman's machinations the children were led to believe that she was going away for a time and the children were anxious to shake her hand and say good-by.

Some may think that it was indecent on the woman's part to attract attention when that was really what she was trying to avoid. But there was method in her madness, as it developed later. Her idea in cultivating the good graces of the children was for the purpose of making spectators believe that she was going on a trip and the children were wishing her a successful journey.

The woman knew the effect that such an impression would have on the busybodies of the neighborhood and she was very desirous of allaying all suspicion. She realized that so long as she could deceive the women and prevent them from gossiping she had nothing to fear. So she used the unsuspecting children to work her scheme.

No matter how clever, such schemes are only made to be discovered. At first the women of the neighborhood were just interested when they noticed the woman with her Gladstone bag bidding the children adieu. They thought no more of the matter.

But what were they to think when about an hour afterward the woman reappeared, this time coming around the opposite corner? They were puzzled at the matter. Their suspicions grew when the woman with the Gladstone bag made it a habit to go on two trips a day, never forgetting to say farewell to the children. In a short while the busybodies knew the truth.



The great Assuan Dam is an enduring monument to the genius of Sir William Willcocks.